

## **REMARKS**

### **Introduction:**

In accordance with the foregoing, claims 1, 7 and 14 have been amended and claims 19 and 20 have been added. No new matter is being presented. Therefore, claims 1-20 are pending in the application and reconsideration is respectfully requested.

### **Applicants' interview with the Examiner on May 22, 2008:**

Applicants wish to thank the Examiner for the courtesy of the interview held on May 22, 2008, during which the present claim amendments were discussed. While no formal agreement was reached as to the allowability of the claims, applicants were pleased to hear that the Examiner indicated that the present claim amendments necessitated a further search and that contact will be made with the applicants' representative before any further action based on that search will be taken by the Examiner.

### **Rejections under 35 U.S.C. § 103(a):**

Claims 1-6, and 14-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kagawa et al., U.S. Patent No. 6,910,118 (hereinafter referred to as "Kagawa") in view of Yang et al., U.S. Patent No. 6,424,650 (hereinafter referred to as "Yang"), and further in view of Gooch et al., U.S. Publication No. 2003/0174710 (hereinafter referred to as "Gooch") and O'Connell et al., U.S. Patent No. 6,922,410 (hereinafter referred to as "O'Connell"). In addition, claims 7-13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gooch and O'Connell in view of Yang and further in view of Kagawa. These rejections are overcome.

Regarding the rejection of claim 1, it is noted that claim 1 recites "a hash operation means for applying first and second similarly constructed hash functions and thereby outputting multiple entry data corresponding to respective first and second hash values of an inputted fixed length datum," and "a main memory pointer table, which is associated with the first hash function, and a subordinate memory pointer table for use when the main memory pointer table is filled to a predetermined level with respect to N numbers of memory banks, which is associated with the second hash function." These features are not taught by any of the references either

alone or in combination with each other.

With respect to the recitation of the first and second similarly constructed hash functions, applicants note that the relevant citation in the Office Action for this feature is to Kagawa. However, as mentioned during the interview, Kagawa does not disclose similarly constructed hash functions. Rather, Kagawa is directed to a rehashing operation that is carried out by clearing all of the valid bits and selecting 8-bit data at different positions from the 32-bit CRC 32 output. *See Kagawa, at column 4, lines 30-35.* Thus, applicants respectfully assert that Kagawa, as well as the other references, fail to teach or disclose the use of first and second similarly constructed hash functions, as claimed.

With respect to the recitation of the main and subordinate memory pointer tables, it is noted that, as claimed, the subordinate memory pointer table is for use when the main memory pointer table is filled to a predetermined level with respect to the N numbers of memory banks. Here, the relevant citation in the Office Action is to Gooch, but again, as mentioned during the interview, Gooch merely discloses the simultaneous use of multiple hashing units, which have been alleged as corresponding to the claimed main and subordinate memory pointer tables. Thus, applicants respectfully assert that Gooch, as well as the other references, fail to teach or disclose the use of first and second similarly constructed hash functions, as claimed.

As an additional matter, to the extent that Gooch may be seen as teaching more than one hashing operations and more than one hash pointer, as alleged in the Office Action at page 14, Gooch clearly teaches that the various hash operations and each of the hash pointers are operated simultaneously. *See Gooch, at column 6, line 37 – column 7, line 6.* This stands in contrast to the claimed invention in that the second hash function and the subordinate memory pointer table are each only employed when certain preconditions regarding the main memory pointer table are met.

Thus, since the additionally cited references to Yang and O'Connell fail to cure the defects of Kagawa and Gooch, applicants respectfully assert that claim 1 is patentably distinguished over any combinations of the references and that, therefore, the rejection of claim 1 is believed to be overcome.

Regarding the rejections of claim 7 and 14, it is noted that these claims recite similar

features as claim 1. Therefore, the rejections of these claims are believed to be overcome for similar reasons as set forth above.

Regarding the rejections of claims 2-6, 8-13 and 15-18, it is noted that these claims depend from claims 1, 7 and 14, respectively, and that, therefore, the rejections of these claims are overcome for at least the reasons set forth above.

**Newly added claims 19 and 20:**

Claims 19 and 20 have been added and recite “detecting an exist bit associated with said data table into which the inputted single fixed length datum is to be registered, determining if the exist bit indicates an on-state or an off-state of said data table, and when the exist bit indicates the on-state, proceeding with the registering and, when the exist bit indicates the off-state, proceeding with the second hash operation,” as well as “where the exist bit indicates the off-state, further comprising indicating that a next registered single fixed length datum is to be registered in the subordinate memory pointer table.” These recitations are believed to be allowable over any combination of the cited references.

**Conclusion:**

It is believed that the foregoing amendments and remarks place the application in condition for allowance and an early and favorable action to that effect is respectfully requested.

The Examiner is invited to contact Applicants' attorney at the below listed phone number regarding this response or otherwise concerning the present application.

If there are any additional charges with respect to this Amendment or otherwise, please charge them to Deposit Account No. 06-1130.

Respectfully submitted,  
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